

A VISION OF SOUTHEASTERN ALBERTA IN 2035

Ramblings from Rob Gardner

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Introduction

What will our world look like in the future? The answer is up to us, the people of the present. Whatever choices we make, we will be building on our past. We can choose to follow paths that have proven to be wasteful of resources and harmful to our lives, or we can choose positive examples. The economics (and problems) of the modern consumptive society are explained concisely by [Charles Marohn](#) in this note and the video that it includes. Outspoken American politician Alexandria Ocasio-Cortez paints a vivid [Message From the Future](#) to show us what is possible, and what we can aspire toward.

Perhaps if we in southeastern Alberta had a similar vision, we could take more definite steps toward achieving it. If our scenario is looking into future conditions, what point in time should we consider? [Canada's federal government](#) has set a target of 2035 for the sale of the last internal combustion-powered light-duty vehicle. [Norway](#) set a more ambitious target of 2025, and is on target to reach its goal early. This rapid change shows that once a trend gains momentum, the early adopters are soon joined by a mass of followers. Rapid change in our lifestyle is not only possible, it already happens frequently. Our collective challenge is to guide this change so as to reduce the production of carbon while improving our quality of life, as well as equity and social justice of all people.

This present essay does not expand on the bold, positive and often revolutionary ideas of the [Solar Punk](#) movement. Instead, it focuses on southeastern Alberta, an affluent region with well-educated citizens. I present a somewhat staid vision of what our society

Note: [Underlined](#) names or phrases generally are links to further documentation of that particular concept.

could look like in just 12 years, the length of time it took smart phones to move from an expensive novelty to a universal and essential investment. Federal initiatives guarantee that substantial changes to our transportation system will take place. I have chosen several other fields to explore, with each area comprising various actions and approaches.

What makes this vision more than a pipe dream is that every one of these suggestions is in use somewhere in the world. Most are already implemented in Alberta, and just need to be rolled out to our region. References have been included so the original source can be consulted.

Dr. Ron Brunner, of the University of Colorado, was asked by NASA's Earth Science News what the next step toward creating more climate action successes would be. He responded:

"The highest research priority is harvesting experience, in the form of comprehensive and detailed case studies, from many more successful communities. We have paid too much attention to barriers - to research problems that have yet to be solved. It's time to pay attention to these success stories. They can inform and inspire action and start new communities down their own unique roads to successful climate adaptation. For these communities, the highest practical priority is to build on what has already worked, not reinvent it."

Project Drawdown identified more than 80 existing practices and technologies that remove carbon from the air, or prevent it from being put into the air. The Transition Town movement noted that virtually every one of these climate solutions also creates a more liveable and equitable community. Social justice is the same as climate action, but more tangible. We will get more action if we stop talking about climate change and focus on building stronger communities.

Challenge

Currently, people do not feel qualified to identify environmentally sustainable activities, and therefore do not get involved. For almost 100 years, people have been told that problems must be handled by professionals, generally from a large city. Prior to that, people generally grew much of their own food, built their own houses and drove their own vehicles.

People now believe that they cannot influence community events in a meaningful way. Considerable negative media coverage casts doubt on the effectiveness of activities. As a result, citizens are not in the habit of visualizing what the future could look like. They are even less able to imagine the synergistic impacts of various positive actions supporting each other.

Even people who want to change have trouble finding information about how to get started. Perhaps this all-encompassing topic is too big for a single search term. This paper intends to provide a vivid image of what a sustainable Alberta could look like in just a few years, so people can visualize how they can get involved.

But first, let me give a few broad directions that I see as being important.

Our society will gradually grow more sensitive to the natural world of which we are an important part. Our activities will grow to resemble the complex, interconnected organic cycles of nature, by finding productive uses for waste and producing our own energy. Our strongly competitive economy will gain resilience through increased co- operation. Citizens will be encouraged to gather in groups to gain influence, offsetting that of large corporations and governments. The heightened interest in government will give individuals a better understanding of the challenges their elected representatives face, even as their attention stimulates actions more closely aligned with the public interest.

In many cases, the so-called Third World will provide valuable models for more intensive and less disruptive methods of gaining a livelihood. Economic development agencies and entrepreneurs will focus on the local production of currently imported goods.

To summarize, the guiding principles of a stable and flourishing human society will be:

- greater emphasis placed on social relationships; i.e. Denmark's concept of "hygge"
- greater self-reliance, in both the personal and community senses;
- value is given to waste materials, spaces and skills by using them to create innovative products;
- the principles of Freedom and Responsibility are rebalanced, ensuring that the freedom of individuals does not come at the expense of the broader society; and
- a more balanced mix of co-operative and competitive behaviour is supported.

So, if we were to step through a Time Warp to 2035, what would we notice in this sustainable world?



WELCOME TO TRANSITION TOWN MEDICINE HAT 2035

Introduction

Medicine Hat's city council finally tired of the jokes about their city's motto, "The Gas City" and, in early 2024, decided to re-brand as "The City With Energy". This new image was supported by the fields of solar panels and forests of wind turbines newly installed nearby.

City Council wanted to go beyond marketing slogans, though, and passed a resolution to endorse the Transition Towns movement. This loose organization supports many activities that build a stronger sense of community while diversifying our economy.

The first result of this mandate was directing a greater amount of the growing profits from the municipal electrical utility to expand the existing Hat Smart program. HAT Smart offers incentives to help property owners and builders make environmental and energy-conscious upgrades when renovating existing residences or constructing new homes.

Citizens enthusiastically supported this program as a way to reduce their utility bills. This warm reception encouraged Council to fast-track other aspects of the new Environmental Road Map. In just a couple of years, our city presented a confident and positive attitude in many aspects of urban life.

VISION 2035 - PERSONAL ACTION

People have largely accepted and acted on the recommendations of the United Nations, known as Actions For A healthy Planet. These actions are summarized as:

Save energy at home	Change your home's source of energy
Switch to an electric vehicle	Walk, bike or take public transport
Consider your travel	Reduce, reuse, repair and recycle
Eat more vegetables	Throw away less food
Speak up	Make your money count
Clean up your environment	Plant native species

People taking action in these areas feel a sense of accomplishment, and go on to support, or even demand, similar steps from their governments.

These actions are most visible as numerous bikes on many pathways, solar panels on many roofs and clothes hanging on many clotheslines. On a larger scale, people will notice more small specialty stores that used to be confined to big cities. Roads, schools, parking lots and other facilities haven't got any bigger, although the population has increased. We see more bustle on the street, and people seem to be having more fun.

VISION 2035 - SPACE FOR NATURE

In 2022, the federal government committed to supporting protected areas on 30% of Canada's lands and waters by 2030. These numerous and expansive sites will connect various provincial lands to both formal and informal private conservation lands (Nature Conservancy of Canada, Ducks Unlimited, Alberta Conservation Association) through corridors. Two keystone grassland species have returned, bringing myriad benefits to smaller species as described eloquently in Olson and Janelle's book The Ecological Buffalo. In particular, bison on larger reserves provide spiritual rejuvenation for aboriginal people, as well as healthy food. Our prairie streams have come to life with new ponds created by beaver. From frogs to sage grouse, our wildlife species have welcomed these chubby rodents back. Ribbons of vibrant green shrubbery mark the newly rejuvenated water courses.

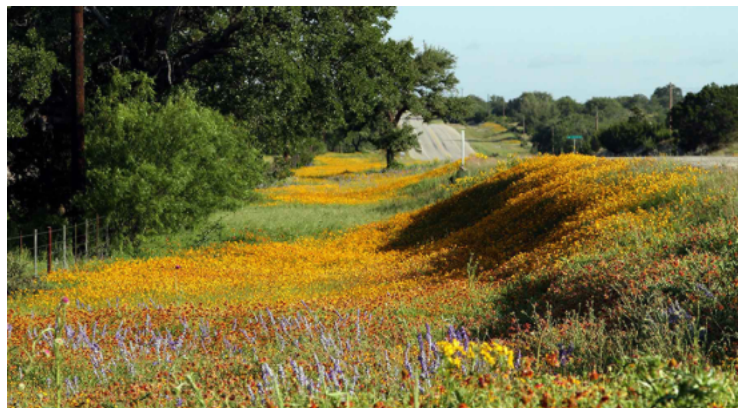
These efforts were motivated by the remarkable success of wolf reintroduction in Yellowstone National Park. A total of 31 wolves were moved to the park in 1995, and rapidly brought that ecosystem to life. From grizzly bear and lynx to aspen and willow, many species grew in abundance. Even the beaver, a prey species for wolves, increased. This positive, non-linear change shows how small changes can support rapid improvements, not just in the natural world, but in our human activities as well.

Governments did not invest in our natural ecosystem on their own; they needed visible support from our citizens. We show this by joining national conservation organizations such as Nature Canada, Canadian Wildlife Federation and Canadian Parks and Wilderness Society that all have excellent track records of encouraging both the federal and provincial governments to conserve public lands. More personally, though, many residents welcome nature into our own yards, posting the slogan "One percent for Nature" on signs in the front yards.

This modest "ask" allows residents to get in touch with natural processes, cycles and species. For a typical urban lot, this amounts to a space about the size of a queen-size bed. This can hold a small shrub and a few wildflowers. Native pollinating insects quickly find the plants and settle in. Watch for native flowers in local garden centres: they are becoming a "thing".

Larger sites, such as school playgrounds and parks, can have larger spaces that include native trees. Teachers enjoy the instructional opportunities that these mini-prairies will bring, and children will love the creative play.

Roadsides and other waste space are planted to wildflowers. Texas Department of Transportation has



promoted this for many years, and now has spectacular displays of flowers along their roads. They save tax dollars, as they need less mowing than grass.

VISION 2035 - WATER

Agreements with other provinces & United States (Milk River Basin)

Supply changes - urban needs, new use by Piikani people, glaciers, wildlife (beaver, cottonwood trees, fish)

Irrigation - acreage, types of crop

Permaculture possibilities for better management

Invasive species - zebra mussels, flowering rush, carp

Relationships to agriculture, rural villages, recreation: unifying factor

VISION 2035 - ABORIGINAL PARTICIPATION

[Further input on this section is welcomed to better reflect the indigenous perspective.]

The indigenous people living in what is known as south eastern Alberta have reclaimed much of their traditional culture. Although many people had lost their way due to government suppression of ceremonies and language, some people retained knowledge of the ceremonies, skills and attitudes of their ancestors. These knowledge keepers, inspired by the work of other First Nations, have taught and motivated others. Katherine Palmer Gordon's 2023 book This Place Is Who We Are (Harbour Publishing ; in Medicine Hat Public Library) has inspired many people. This book presents a dozen moving stories of aboriginal success: in culture, conservation, education and business.

Locally, the Blackfoot Crossing Historical Park is a depository of cultural knowledge which has instilled pride in the aboriginal culture. The Miywasin Friendship Centre and several other similar places allow aboriginal people to gather for socializing and support.

In the last few years, the Kainai People have expanded their linnii Repatriation Project to become co-managers of the former CFB Suffield, enabling them to establish a large buffalo herd. This has instilled pride in their culture and brought a substantial income for the tribe.





VISION 2035 - AGRICULTURE and FOOD SECURITY

Most farms, including this one in the air photo below, use regenerative agriculture, fixing carbon while growing healthy food. A mixture of intensive vegetables, more variety in crops, and adding livestock to the crop rotation brings health to the soil while stabilizing the farm income and providing a living on far less land. The rural population has grown steadily as this concept spreads.

The diverse practices that comprise Regenerative Agriculture add up to a significant saving in fuel costs while sequestering carbon in our soil. Cover crops, zero tillage and better range management are just some fields that have been greatly enhanced.

The initial Covid lock-downs showed how precarious our supply chains were, with our food supply showing particular strain. Even an agricultural area like southern Alberta depended heavily on imported food.

The availability of irrigation water allows the growing of very high value vegetables, dry beans and other specialty crops. Progressive farmers around Bow Island and Redcliff mentored new young farmers working small holdings to grow vegetables.



Localizing our food supply is quite practical, and generates thousands of new jobs. But to ensure these are quality positions means we embraced a “community development” model, not the past industrial agriculture. Micro farms use intensive techniques to grow our food year-round, on only a few acres each. Each owner-operator benefits from a niche, either a specific product or a particular market, and receives the well-documented rewards of an entrepreneurial enterprise. Some successful farmers

spend much of their off-season coaching new farmers, acting as mentors or consultants.

Large-scale vegetable farms are practical, too, although much more expensive to start. For example, El Dorado Farms pioneered the vegetable industry in southeastern Alberta. With more than 1,000 acres of onions, turnips, broccoli and other veggies, they showed that specialty crops are both viable and profitable.

Many sources of healthy and locally grown food are now widely available, such as: personal gardens, community gardens, “you pick” farms, market gardens, small farms, commercial greenhouses, fresh markets, buying clubs, co-operatives, and Community Supported Agriculture operations. Medicine Hat’s Community Food Connections Association summarizes most of the opportunities.

Some of these small farms co-operate with Red Hat Co-op, a common marketing organization which supplies some restaurants and larger supermarkets with fresh vegetables and other foods.

In other situations, larger farms have their own markets in residential districts. These may use re-purposed gas stations, providing fresh foods similar to smaller versions of Calgary’s Sunterra Markets. Some will feature a coffee shop or even a restaurant selling their own produce, like Broxburn Vegetables near Lethbridge.



South Country Co-op pioneered the large-scale sourcing of local produce. With many-link food chains of the retail giants magnifying price increases, buying local became a powerful tool in keeping prices low, while still giving producers increased prices. By “producers”, I mean not only farmers but ranchers and fish farmers, and their related value-added businesses.

Technical innovations allow our growing season to be greatly extended. Inexpensive hoop houses provide shelter for tender seedlings in the spring, while more elaborate

solar-heated greenhouses grow crops year-round without fossil fuels. (See Dong Jianyi's Red Deer-area solar greenhouse on Youtube, or learn about "Chinese Greenhouses".

Municipalities support more local food production by creating numerous community gardens. Unused urban land is planted to fruit trees and bushes which provide food for citizens. Where pedestrian access is not safe, such as highway margins, the lands will be planted to native flowers and shrubs.

Backyard chickens were considered a quirky pastime, but with avian flu continuing to ravage the giant chicken factories, the more resistant heritage breeds are coveted, and bring top dollar at local markets.

A strong and interconnected agricultural eco-system is developing, with one company using the wastes of another. (See the chart titled: Ecosystem of Agricultural Activities (Gardner 2022). Lethbridge is making good progress toward this. For example Lethbridge Biogas Ltd. processes feed lot manure into natural gas, but there is room for dozens more plants of this size. Another local example is Prairie Gleaners dehydrating surplus vegetables from large greenhouses, then sending their peels and spoiled produce to T.R.A.D. Worm Industries to be processed (eaten) into potting soil and microbial inoculant. Local slaughterhouses and butcher shops like Premium Sausage and Deerview Meats are more local examples. Hunting has become a respected means of sustainably harvesting organic meat.

When these co-operating farms are physically close and develop a strong social connection, they become known as Circular Colonies. Each family in the "colony" has their own operation, but they come together to help each other with labour-intensive activities, much like the traditional branding or barn raising. In some cases, the land is held in a condominium type of ownership.

High schools, particularly in towns, have Farm Clubs to introduce students to various forms of agriculture. Irvine School's Agriculture Discovery Centre was an early and successful example. Field trips are facilitated by using the school's team bus.

With more people using the land for more diverse purposes, from enhanced wildlife to wind turbines and recreation, a new profession has emerged: the Range Rider. These generalists ensure the natural ecosystem is respected, acting as liaison between humans and the natural world. They know their territory intimately, and are able to reduce the friction between various stakeholders. They also lead the restoration of existing damages, including the removal of invasive species. They have practical knowledge in the areas of water, range and wildlife management, as well as promotional skills. Agricultural societies and rural municipalities recognize the money-saving value of the early detection of invasive species, and support the Riders' wages. The initial goal of one Rider for every township of land is being approached, as new apprentices are matched with experienced managers.

Non-traditional crops find support from people with certain interests. Bison become a tool for expressing reconciliation with aboriginal entrepreneurs, while weed-munching goats assist meeting land management goals as well as providing meat for people of mid-east heritage.

VISION 2035 - ENERGY

Alberta has long benefited from extensive deposits of petroleum and natural gas. These natural resources provided an excellent standard of living at very low cost. However, this extravagant use of energy is now recognized as unsustainable.

Alberta also has excellent opportunities for solar and wind power. Both kinds of renewable energy installations of all scales are widespread, from residential roof-tops to industrial sites of hundred of hectares. Particularly notable are solar panels on public buildings, inspired by the small town of Raymond's push to become "net zero" with extensive solar panels on all their public buildings. They had benefited from expertise and support from the Municipal Climate Change Action Centre. As a bonus, the extensive roofs of solar panels showed government endorsement of solar as a viable power source.



Now, many villages, towns and cities have gone the next step, following Medicine Hat's lead by creating municipally owned electric utilities. More recently, people who believe in energy transition have been inspired by the Bow Valley Green Energy Co-operative to start their own local co-ops.

Some renewable energy sceptics had worried about our grid needing extensive up-grading but these doubts have proved unfounded. Strong energy conservation efforts, coupled with "time of use" variable prices evened out the demand curve. Battery research responded to the challenge, bringing the price per Kwh down dramatically. Converting almost all the remaining users of fossil fuel to electricity not only reduced carbon output, it led to overall reduction in total energy use, as thermal generation of electricity is very inefficient. Further, electric motors are far more efficient than internal combustion engines.

While not generating much carbon dioxide, solar and wind power do have significant concerns that are being addressed. The sheer cost of building the new infrastructure must be paid for, to a large extent, by the large profits gained from fossil fuels. Ways for agriculture to continue on land used for energy production are important. In the longer term, simply shifting an unsustainable fossil-fuel-based economy to a solar and wind economy will eventually cause problems. Significant steps are being taken to lower overall energy consumption while converting to renewable sources. New storage systems, including hydrogen and batteries, smooth the irregular supply of renewable

energy. At the same time, our use of energy is being adjusted to match the predicted supply. For example, Lethbridge Iron Works, which uses large amounts of electricity to melt iron, schedules its main consumption period for low-demand times.

Denmark, with its long history of depending on renewable energy, has provided inspiration for Alberta development. (75% of Denmark's electricity is renewable in 2030.) For example, Danish "Smart" technology allows batteries in vehicles to store significant amounts of power for use across their grid. This transition is being speeded by the end of all subsidies for fossil fuel companies.

The mandate for the University of Lethbridge's Water Institute for Sustainable Ecosystems has been broadened to include multi-disciplinary research on electricity storage and demand reduction. Medicine Hat College, as a partner, provides more practical training for people constructing the new energy system.

Home Energy Efficiency Case Study

Corlaine and I wanted to reduce our carbon footprint, but could not justify the expensive energy upgrades on a financial basis. However, with the federal Carbon Tax increasing steadily and improved grants available, 2023 seemed like the year to make the leap. But where to start?

Both the HAT Smart and Greener Homes grants required a professional energy audit to ensure the improvements will be effective in reducing energy use. Advanced Energy Advisors was selected from the Natural Resources Canada website, based on a recommendation from a friend, and their having a local representative, Kent.

With Kent's action plan in hand, we started to seek contractors. We used a three-pronged approach to conserving energy:

1. Reduce heat leakage through buying better windows, sealing around the foundation, and adding more insulation in the attic and basement.
2. Install a mini-split heat pump to supplement the ancient furnace on all but the coldest days.
3. Add solar panels to produce the extra electricity needed to run the heat pump.

After only seven months, the new solar panels seem to be producing enough power to offset much of our residential need. The heat pump will use more electricity this winter, so a request will be submitted to the City's Utilities Department to increase our solar capacity. We remain connected to the natural gas and electrical utilities. These networks act as large batteries to back up our less dependable but energy efficient improvements. The connection fees, which amount to about \$100 per month, allow us to have a virtually unchanged lifestyle.

Sidebar: Does it seem odd that the City electric utility will not allow individuals install mini-generators for the City's use, at their own expense? What would happen if

everyone did that? We would have more power to sell on the lucrative spot market, that's what.

We hope to reduce our heating bill by half (\$500 per year) as well as our electricity bill (\$400). Grants covered about half of the \$16,000 total capital expense. With these conservative estimates, we will recover our money after about 10 years. Recent electricity and natural gas price increases may substantially reduce that time.

Over the next few years, we hope to electrify our home completely. Our second, older, vehicle will be replaced by an e-bicycle for doing errands. Our newish water heater will be replaced with an electric version when it wears out. Our main vehicle will be replaced with an electric vehicle in a few years, as the current car ages and the electric versions become cheaper. If our solar panels can be increased to meet the increased demand, we will become carbon neutral. As it is, we will have a low and virtually fixed utility bill for the next twenty years.

Our efficiency program has grown to include the garden as well. The landscaping in our yard reflects two trends. Much of the back yard is given over to growing vegetables intensively, under a canopy of both fruit trees and semi-native shrubs. (This approach is sometimes known as a food forest.) All our kitchen and garden waste, including grass clippings and fallen leaves, is composted and returned to the vegetable garden. The decorative area of the yard features low-water perennial flowers and an increasing variety of native wildflowers. As a measure of our eco-friendly landscape, we have seen over 30 species of wild birds in our yard. The shade and heavy mulch reduce the watering needs. Water harvesting means our total water consumption is still quite low, despite the good food production.

VISION 2035 - COMMUNITIES

INTRODUCTION

Modern communication gives us access to almost every culture on earth, with the myriad approaches to living and interacting, but was also leading to a homogenization of our society. Many people believe that the extravagant expenditure of resources in modern western society did not lead to happiness, so they decided to adjust their approach.

In particular, rural living has become revalued. Around the world, people were lured to big cities, in spite of often dreadful living conditions. They hoped for an exciting lifestyle and good employment. Too often, the reality was grinding poverty. In North America, people had an option: return to smaller communities, and they did. Slowly at a



first, then rapidly as the role models and mentoring programs such as Young Agrarians increased.

A dramatic decrease in the use of fossil fuels in agriculture led to a resurgence in the appreciation of farming skill and personal involvement. Increasingly, people need to live close to the land where they raise food and build their own houses.

Hamlets, with six to ten families living within sight of each other, and villages of about 100 families dot our landscape. These places provide real alternatives to people who do not respond well to urban situations. People who like to see the concrete results of their labour, those who enjoy working with plants and animals, and those looking for a more creative and less structured lifestyle all enjoy rural life.

RURAL COMMUNITIES

This approach to grassland conservation builds on the thoughts and suggestions of other writers. By taking success stories from other parts of the Great Plains, the economy, quality of life and natural environment can all be enhanced.

Key aspects of this approach include:

- celebrating the contributions of ranchers to wildlife conservation by explicitly describing the many common values they share with urban conservationists.
- supporting existing ranchers in various ways including compensation for providing ecological goods and services; South of the Divide Conservation Action Plan
- presenting a positive view of the wonder and abundance of the native grassland of southeastern Alberta, as it is now, and, more remarkably, as it could be soon;
- providing a mechanism for individuals or organizations to express support for the vision as they work toward implementing some components; i.e. Alberta Conservation Association
- broadening of the economy by increasing value-added services; i.e. Lethbridge district
- developing semi-formal training opportunities for young people who wish to enter the ranching business;
- initiating a “buy local” program through social and financial incentives, to support local businesses;
- setting up more ways to sell food products directly to consumers, thereby increasing profit margins and employment in the community; and
- aiming to be a financially self-supporting organization.

I present the following description of one way that southeastern Alberta could develop. Does this Vision encourage you to get involved?

VISION OF A RENEWED PRAIRIE

The village in southeastern Alberta bustles with traffic. Cars carrying canoes and mountain bikes are clustered around the Outdoor Adventure Booking Office. Other people leave the farmer's market with bags of produce. The nature centre and museum join other bright businesses along the main street. The notice board at the town hall has job postings for the local meat packing plant and a contractor building the high school's Equestrian Academy, as well as posters for several concerts and the rodeo.

What brought this activity?

Ten years ago, the village and county councils considered the district's unique assets. Together, they considered how to capitalize on them to stimulate the local economy, and draw people to the area. The pristine landscape was an obvious starting point, but it needed a focus - a "wow" factor - to generate interest. What about bringing back the spectacular wildlife that once roamed the area? This thought led to a community proposal to create a new grassland conservation area.

After animated discussion, the concept came together, based on bison ranging across a hundred-thousand-acre wilderness, just 5-10% of the region. Step by step, this was achieved. The bison herd started with one rancher who shared the dream of a wild, natural grassland. Soon, others joined him for the low maintenance aspect of bison. Now, a jointly-owned herd one thousand strong rumbles across the prairie, a sight not seen for 150 years. Elk and pronghorn greet the eye over almost every hill. Chains of beaver dams support ribbons of green shrubs, with both resident and migratory birds. On the majority of the grassland, cattle graze as they have for a century. The renowned specialty beef brings a premium price at the farmers market, as well as being a source of employment for residents.

This area has become known across the prairies for the positive way it enables all residents to participate in the stewardship of the landscape. A training centre for young ranchers ensures the beef ranching industry remains resilient and vibrant. Long-time ranchers are respected for their local knowledge that they pass on to the next generation.

The central village boasts of modern amenities while enabling people to live close to the land. The enhanced quality of life has drawn people from local ranches and from outside the area. Some see the village as a prototype for a future community, with cutting-edge energy and food production techniques blending with time-honoured traditions. For example, some youth came to help build the straw-bale homes the village has become known for.

A community organization coordinates the conservation-based business activities, including the export of food. Surplus wildlife supports both recreational hunting and commercial meat production. Recreation is centred on rivers, supported by nearby equestrian experiences. Developed recreation sites and services enable both residents and visitors to enjoy the landscape.

Organizations around the province want to be part of the project. The community's enthusiastic and well-supported plan brought investment from the government, environmental organizations, and companies. More importantly, though, the project also gives local citizens both a common direction and a real pride in their home.

Numerous trends in modern society are converging on a more important role for small towns. Some city people are not comfortable with the fast-paced urban lifestyle and would welcome an alternative. Although most urban people may not want to live on a farm, many recognize their disconnection from the source of their food, and want to bridge this gap. Planners tie the health of the land directly to benefits in nearby urban areas, particularly through watershed planning. Increasingly, ranchers are being seen as important players in conserving species at risk.

As the vision conveys, we picture the best of ranching lifestyle merging with modern technology and attitudes to present an attractive alternative to urban living. Large blocks of land (1,000 - 10,000 sq km) are set aside for the natural environment, totalling at least 30% of the landscape. (Environment Canada) These areas are often used for extensive, low-impact products like wilderness recreation, range-fed beef or forestry, in addition to ecosystem services. In the grassland region, several of these sites host herds of bison which are managed by the Siksika peoples.

URBAN DEVELOPMENT

Urban centres of all sizes have been built at a human scale, with pedestrian use given priority over vehicles. Steve and Wanda Mouzon's book Original Green (<https://originalgreen.org/resources/original-green-scale/>), an up-date of Christopher Alexander's A Pattern Language (a PDF version can be found at the bottom of this page.) provides inspiration for, and illustration of, loveable neighbourhoods.

The emphasis on the small scale of neighbourhoods led to renewed interest in small town living. Any increase in national population is being absorbed by the re-population of our rural areas. Industrial-scale resource use, including farms and ranches, is being replaced by smaller and more sensitive operations. In the grassland, a strong agricultural ecosystem is developing, with more diverse crops being exported to the provincial market.

Villages of 100 - 200 people are located every 10 - 20 km, but far enough from larger centres to discourage becoming "bedroom communities". These villages are attractive to many former urbanites, with the municipal approval of owner-built homes reducing the costs of getting established. Villages have enough people to support a one or two room elementary school, without subjecting young children to a long school bus ride. Each village has one or two value-adding business that export to the district. Near each village can be found many small (<160 acres) mixed farms, each with a specialty crop or product. Each village or neighbourhood (in towns and cities) will have a public building for meetings, concerts and festivals.

Towns of 500 - 1,000 people every 50 km have enough residents, both in the town and nearby villages, to support a junior high school.

Southern Alberta already has a large town of 5,000 - 20,000 people every 100 km. (Brooks, Taber, Cardston, Fort McLeod, Crowsnest Pass) These places may need specific support to sustain their population. Locating high schools and some government offices here can be important.

Medicine Hat, Lethbridge and Calgary are large centres giving access to specialized services for their regions.

Southern Saskatchewan comes close to having this distribution of cities, towns and villages. The two major cities are supported by a dozen towns and many villages. The theory of this settlement pattern is discussed in Alexander; 1977 A Pattern Language: Chapter 2 The Distribution of Towns.

Even in large cities, neighbourhoods can and do take on the form of villages, with mixed land use. A trend toward home occupations and a land-use pattern supporting a mixture of commercial and residential uses lead to more distinctiveness of neighbourhoods. Preferences relating to ethnicity, employment or cultural interests all encourage people to cluster together. While a range of choices for locating one's house is desirable, care has been taken to ensure each area contains a mix of housing options.

Each "village" develops one or two features that the area is widely known for. i.e. a prominent park, concert hall, educational institution, dominant ethnic culture. Each district takes pride in its community-building projects, such as community gardens, tool library, public meeting space and block parties.

An unused building, perhaps a large house or older commercial space, becomes a business incubator, providing office space with basic tools and furniture, and some space for start-up retail sales. The Crossroads Market in Calgary fulfills many of these functions in a fun and lively manner.

Golf courses welcome extensive public recreation, like nature observation and cross-country skiing, in recognition of their significant use of public land.

Quality of materials, belongings and experiences if considered more valuable than the quantity. In particular, experiences like the arts, recreation, social activities and music are valued.

Neighbourhood activists have used a variety of ways to get their fellow residents involved in the community. Block parties have become common, with City support through the Connection Community mini-grants. People or informal groups spontaneously provide free hot chocolate at outdoor skating rinks, while others have sing-alongs at campfire circles. Some people have taken inspiration from the people of Longhope, England, who turned their bus shelter into a social area by adding hanging flower pots, a bulletin board, a free library, and a map of the village with points of



📍 The opening of Latchen Central in Longhope. From left to right: Tina Coull, Anne Newbery, Dave Tradgett and Cathy Griffiths with Hope Brook C of E Year 6 pupils Charlie and Sandy (Image: Will Luker)

interest marked. Sites like this are sometimes known as “third places” where people gather spontaneously to socialize. These places to casually get together are essential to building a friendly neighbourhood.

The Community Foundation of South Eastern Alberta has long used income from investments to support positive community initiatives. After the market crash of 2008, which impacted more than local businesses, the Foundation began

investing an increasing proportion of their funds in local enterprises. Food and ecotourism projects have particularly benefitted from this source of capital.

Outdoor recreation using low-cost facilities like spray decks and natural ice rinks are bringing a renewed population of young people who enjoy skating, swimming and other physical activities without the stress and cost of competition.

HOUSING

The Strong Towns program has been enthusiastically adopted by Medicine Hat’s City Council, leading to a variety of smaller homes being created, particularly in the older parts of town. Garden and basement suites, small duplexes and courtyards surrounded by about eight homes are just some of the options promoted by Missing Middle Housing. Many affordable homes were created quickly with little expansion of the utilities or roads. This improved taxation position allowed improvement of transit and recreation facilities.

The overall impact is powerful, with 2026 being the first year that the average size of new houses declined.



Formerly homeless people have been allowed to build their own homes in designated places. Groups of 5-10 owner-built homes are now found in several areas. Just having a place to lock their belongings has allowed people to go to work. Some people have used innovative materials, such as building straw bale insulating walls around used travel trailers. This project is modelled on Portland's Safe Rest program, while encouraging greater participation by the residents.

All urban areas support a mix of residential, commercial and institutional uses, including recreation sites. Fewer people need to commute long distances to their employment.

Retrofitting homes to create suites and duplexes from large homes has several benefits: improved energy efficiency, more companionable lifestyle and letting people live closer to services. Some people, though, still cannot find appropriate housing. The “transitional housing units”, first built in response to the devastation of Hurricane Katrina, have had insulation added and deployed here. The manufacturer, Pallet Shelter, has provided thousands of people with respectful shelter while getting them on the way to better lives.



Interior decorating has embraced the Danish concept of “hygge”. This style emphasizes comfort, serenity and coziness through the use of natural materials and small, personal scale of furnishings. Some think of this as the “Ikea approach”.

Locally owned businesses are well-supported, allowing them to grow in scope and number. Studies have shown that buying at locally-owned stores keeps far more money in the community, to be recycled through other companies. Malls are gradually transitioning to more diverse purposes by adding second storey apartments, converting parking to both housing and more commercial use, and encouraging locally owned stores.

South Hill: An Ideal Neighbourhood

What makes a neighbourhood perfect? And is this the same for both future residents and the City planners?

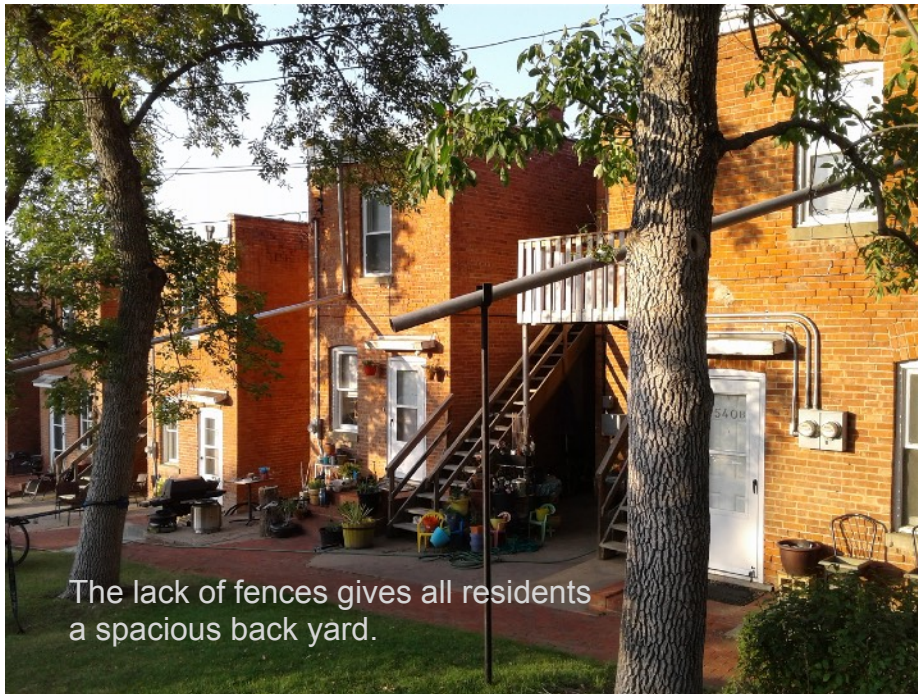
The **City Planner** hopes for good maintenance to keep the assessment high. Modest installation of garden suites and small infill units allows a slightly growing population with little need to expand utilities and roads. High pedestrian and bicycle traffic further reduces the need for expensive infrastructure, and allows a gradual greening of the area, in spite of more residents.



As a **resident**, I hope for a variety of homes. I like a big yard, but I realize that some people don't like gardening. So, mostly detached houses, with some duplexes and small apartment buildings. This variety should lead to a variety of families, too. Some kids, some teens, some empty-nesters and some seniors; enough families to keep a nearby elementary school full.

Tree-lined streets are pleasant, with access to natural landscape a bonus. Walkability is important, with sidewalks and bikeways along many streets, especially to schools and recreation facilities.

The centre of the community will be either the school or supermarket, with nearly everyone living in walking distance; say, one kilometre. A scattering of offices and small stores provide a range of services: doctor, hardware, convenience store, pub, and coffee shop. Informal outdoor recreation facilities like spray deck, outdoor rink and picnic tables will be popular, and might be developed on the school grounds or in small parks.



The lack of fences gives all residents a spacious back yard.

These two ideals come together on the South Hill in Medicine Hat. With the neighbourhood core of Safeway, Moose Arena/ Hill Swimming Pool and Medicine Hat High School, this area is a pleasant home for over 4,000 people within walking distance. The city's downtown area, with its many services and stores, is also within walking distance for many residents.



Modern decor adds interest to the area. Unless you look closely, you would not realize this is a duplex.



Modest, locally-owned multi-family buildings have been built gradually, and now blend into the neighbourhood.



Twenty years ago, the neighbourhood demographics favoured an older population. More recently, younger families have moved in, taking advantage of the economically priced smaller and older houses. Gradually, they have brought the age distribution into a more stable balance.

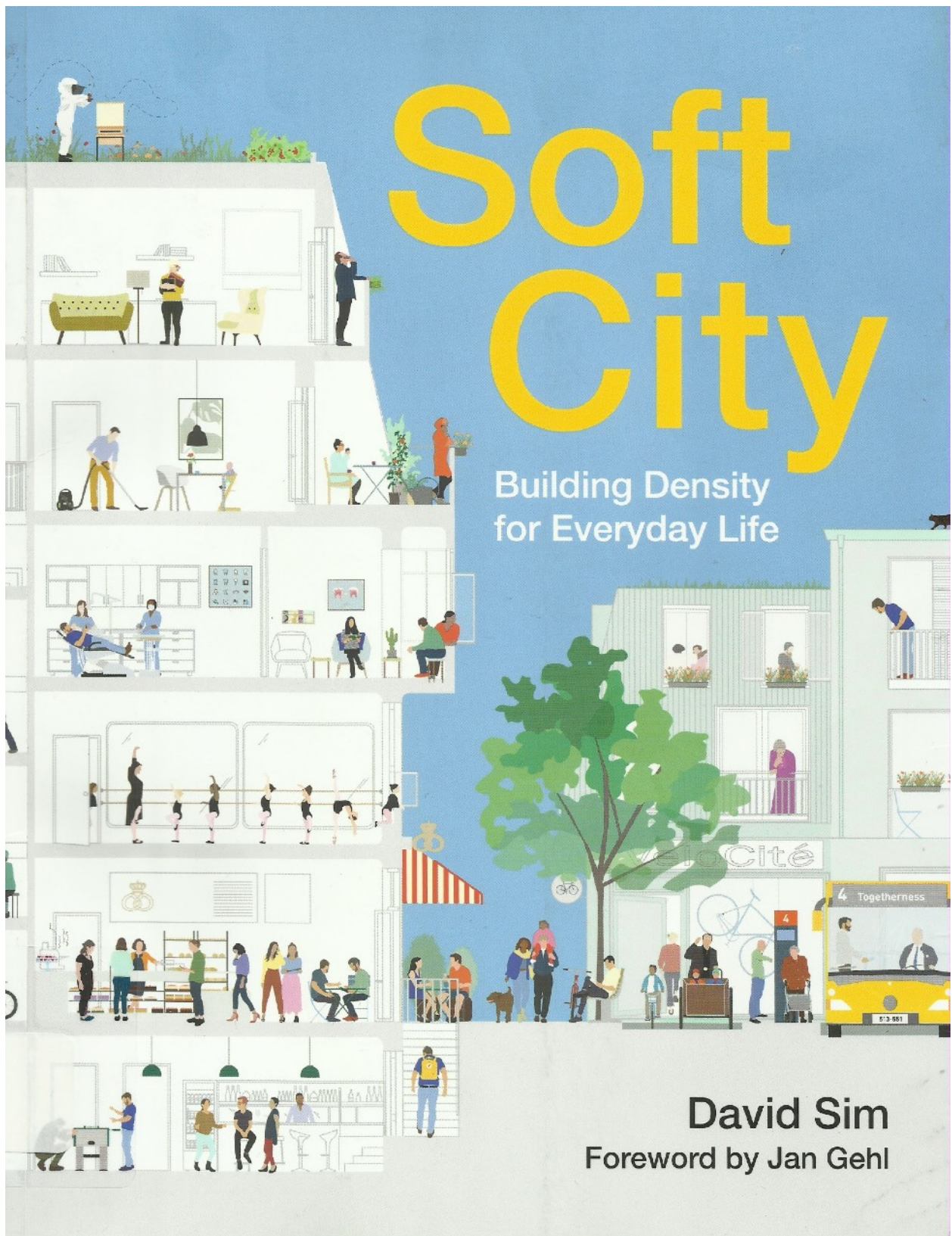
Varied recreation facilities make life fun. Central Park has a water park and two playgrounds, as well as a low-board rink and a disk golf course. A washroom and kitchen make group picnics practical.

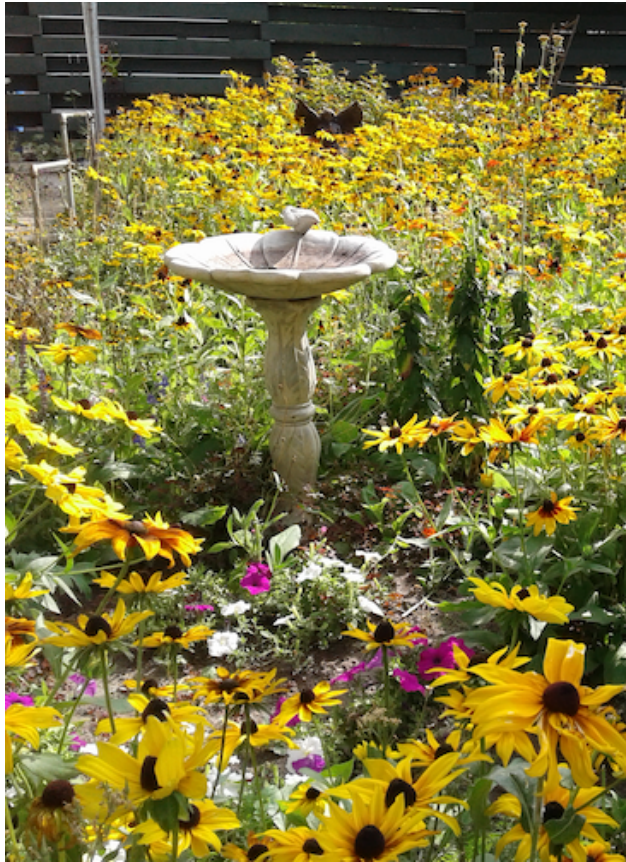
Trails along the east and south edges of the area give access to the natural environment, as well as spectacular views of The Flats area and the South Saskatchewan River riparian areas.



Bike lockers in downtown Whitehorse







You might not put your finger on what is different at first. Then you realize: No garages! What a difference that makes! The streets are interesting to walk down, especially in the shade of the elm and ash trees. Then, as you start to walk around more, you notice the variety in landscaping. Without much concrete in the front yard, the owners have space to express their own interests. Various shrubs and hedges, constructed features like benches and birdbaths, not to mention the vegetables and perennial flowers covering what used to be lawn. Some even have small signs indicating the flowers are wild species, planted to support the pollinating insects. At first, people were cautious about supporting this, but now they take pride in the individualism shown.

Some students are able to walk or ride to classes at Connaught Elementary School and Medicine Hat High School.

The site of the former Central Park Elementary School has become a bustling community garden. The higher part of the site has about a dozen small town homes with another ten apartments above the multi-car garage.

One facility that was missing was a community centre or hub. To meet this need, and inspired by the success of Edmonton's Community Leagues, the congregation at Westminster United Church welcomed residents and community groups into their building. An informal coffee shop with extensive indoor play area brought many families to socialize. The public library soon opened a small branch, aiming at younger readers. Neighbourhood special events became so popular that other districts started their own hubs.



VISION 2035 - YOUTH

The Joint Use Agreement of 2017 between the school boards and the municipal recreation departments allows a range of public activities to take place in school facilities during non-school hours. Activities could include community gardens, open gymnasium, various activity clubs or instruction, and youth groups. In exchange, classes receive free access to municipal facilities like swimming pools, often located nearby or even on the same property. Publicizing this relationship encourages community groups to form, knowing that support and resources are available. Now, most school gymnasiums are available for drop in activities on at least one evening each week.

Non-competitive youth groups like Scouts Canada, Girl Guides of Canada, Junior Forest Wardens and 4-H Clubs are increasingly recognized for not only providing life skills but also helping raise



thoughtful citizens. Scouts Canada, in particular, has a well-thought out program for youth development, known as the Scout Method. The valuable leadership experience received by the young adult leaders (age 18-30) is recognized by employers. Parents organize and raise money for the groups, and train the leaders.

Some young adults who want to make a significant contribution to the sustainability efforts of our society may participate in the federally sponsored Canadian Conservation Corps, where they will receive training and support.

Some schools have naturalized parts of their school grounds, as part of their “1% For Nature” program. This brings vitality to both the site and the students, who love playing there. Several school gardens operate in conjunction with naturalized school grounds. The community garden participants maintain the school garden over the summer, even offering weekly classes for students. These “community gardeners” may even become the 4-H Club leaders.

Public school curricula are all revised to put more emphasis on verbal communication, especially public speaking (4-H Clubs, Toastmasters). A 4-H Club is present in each school, mostly led by non-teachers. These support the public speaking goal while giving many students personal experience with growing food.

Schools have become smaller and more local, allowing students to walk or ride bicycles to school. School buses have been discontinued altogether for high school students, with all students being given a public transit pass. Parking lots at schools have been re-developed as community gardens and/or naturalized spaces for biological investigations.

VISION 2035 - TRANSPORTATION

Canada's federal government has set a target of phasing out the sale of gasoline-powered vehicles by 2035. This dramatic change in such a major industry will stimulate other supportive changes in other aspects of Canadian society.

However, conservationists cautioned that simply replacing gas vehicles with e-vehicles in a one-for-one exchange would not reap the full environmental benefits that are possible. Our culture needs to reduce the need for every adult to own a car. Programs with this goal include public transit, active (cycling and walking) transportation, car sharing, micro e-vehicles (e-bikes, e-scooters, golf carts), telecommuting, and the growth of mixed use town planning. If each of these topics received the creativity and government support provided to the e-vehicle movement, we would have dramatic progress. Copenhagen and Oslo both have particularly strong programs to encourage non-automobile transportation.

An abundant recreational trail network encourages frequent active transportation. For more utilitarian errands, a comprehensive urban bikeway network, separate from the roads, connects residential and commercial districts. These routes also support the many mini-e vehicles (bikes, scooters, golf carts). To achieve this network, City Council dusted off and funded the 2010 Cycling Master Plan, leading to enthusiasm in the cycling community.

Numerous lockers and bike racks allow safe storage while errands are being done. Other bicycle-oriented facilities such as specific traffic lights and bike lanes are widespread in all communities. Bike trailers intended for carrying children are increasingly used for groceries.

Taken together, these changes are reducing the area devoted to roads and parking lots, and save immense amounts of time previously spent building and maintaining both vehicles and infrastructure. In particular, suburban roads can be given a "diet", with bikeways using land deducted from the oversized roads. The health care savings of widespread bicycle use are recognized, and bicycle advocacy groups like Bike Medicine Hat have become influential.

Significantly less traffic reduces congestion on roads. In larger centres, high-occupancy lanes have become widespread, allowing buses to serve as economical public transit.

Regional public transit uses small buses to take people to both nearby towns and the more distant cities. Frequent departure times make this travel option convenient. With the population density growing by about 2% a year through infill, the system gradually becomes both more efficient and more attractive.

VISION 2035 - HEALTH

Health care has long been the major expense for Alberta's provincial government, yet constantly seems to be stretched to the limit. A major change in the approach to health care took place about ten years ago. Encouraged by the federal pharmacare and dental plans, the provincial ministry moved toward a public health model. The Centre for Disease Control published Strategies to Improve Health that pointed toward the best general approaches. The Community Preventive Services Task Force, funded by the American government but operating independently, has identified some 100 well-researched public practices that are supported by strong evidence. The increased emphasis on individuals taking responsibility for their own health resonated with Alberta's governing party's philosophy, and the hope to eventually save money was attractive.

Several decades will be needed to see dramatic changes in our population's health. However, in the shorter term, the province has made meaningful improvements. Over the past decade, provincial grants for recreation facilities have increased while similar transportation funds have been redirected toward from road construction to active transportation. The contradictory practice of paying for both giant highway interchanges and light rail transit has stopped. The provincial building code has been amended to better reflect the need for more modest and less expensive homes. Personal choices that are negative with respect to personal health, including the use of tobacco, alcohol and cannabis, are all being taxed at higher rates. Not-for-profit organizations now use the increased proceeds to educate students about the harm these substances cause.

The design of the built environment, a municipal responsibility, has a major influence on people's health. Here in Medicine Hat, road designs are being adjusted to meet increased demand for e-bicycles and walkers. Safety now takes priority over speed of traffic. Creation of affordable housing has greatly reduced the housing crisis. Smaller schools are being kept open, with more students walking or riding bikes to school.

Most importantly, the active community-building activities promoted by Transition Medicine Hat have brought people together. People now have many new places to meet and chat, and mental health has substantially improved. Neighbourhood associations play a major role in helping people grow the positive feeling of belonging to a group. Citizens have accepted the challenge of taking charge of their own health, and having meaningful influence with their governments.

VISION 2035 - GOVERNANCE

Over the past thirty years, simplistic slogans and divisive party politics have led to widespread disengagement of voters. At the same time, the rise of multinational corporations, under the guise of “free trade”, has led to increased economic disparity, loss of privacy, and a deep cynicism about government. A constant but poorly explained call for “growth” has pushed our society into the unsustainable business model of paying for today’s excesses with tomorrow’s taxes. Citizens realized that a renewed system of governance must be implemented to ensure Canada’s citizens understand the vital role they play in reaching our social, economic and environmental goals.

Canada, Great Britain and the United States were the last western democracies to institute a form of proportional representation, which was essential to restoring healthy governance. This change allows all citizens to participate meaningfully in our nation’s affairs. It will be the foundation for meaningful progress on both climate and social justice issues.

As usual, people who were successful under the previous system cast doubts on the new approach. In particular, Canada’s vast geography kept people attached to the idea of having “their” Member of Parliament, even though that person rarely influenced local issues. Smaller provinces felt this short-coming less, and were the first to adopt proportional representation. Larger provinces, and finally the federal government soon took the plunge.

Luckily, positive role models exist in many other countries. For example, New Zealand has used this method since 1993. After an initial period of concern, citizens now widely support it, and have given it a 70% approval rating in a national referendum.

The change led to a greater representation of Maori and women in the legislature. The greater likelihood of minority governments increased the role of smaller parties, leading to the growth of the Green Party and groups with more narrow interests.

Citizens now take their responsibilities seriously, and participate actively in all levels of government. Government is widely recognized for its vital role of creating a stable foundation for a well-educated and prosperous society. Taxes are considered to be patriotic investments in a prosperous future. At the same time, citizens take a strong interest in how the taxes are spent, to ensure maximum benefit.

Speaking of taxes, large corporations and rich individuals are taxed at a much higher rate. Beside bringing in much-needed revenue, this change will bring a sense of fairness to the majority of citizens.

Municipalities recognize that subsidies and tax holidays intended to attract large investments do not produce long-term benefits for the community. Jobs are subject to

down-sizing, not due to environmental regulations but to automation, competition and a wish to maximize profit.

People increasingly join community organizations such as service clubs and neighbourhood associations to better influence municipal policies. Special interest clubs increase in both number and range of topics. Current examples include the Folk Music Club, Horticultural Club, Community Food Connections Association, Grasslands Naturalists, Bike Medicine Hat and the Fish & Game Association, as well as a dozen service clubs. New environmental non-governmental organizations have sprung up to advocate for specific issues or topics, while working together on larger issues.

Industry remediates all impacts of their resource extraction. If this is not possible, they make substantial contributions to a remediation fund that supports environmental reclamation.

Waste products are identified as resources. A “waste exchange” information centre matches existing waste products with potential users. A business cluster has developed at the landfill site, where waste products receive a new use. The businesses receive their power from the methane generated at the adjacent Waste Water Treatment Plant.

Advertising has moved almost entirely to direct messages sent to personal devices, on an “opt in” basis. Streets are significantly less cluttered, and fewer people feel pressured into buying unnecessary “things”.

All public buildings and many businesses, as well as popular parks, have water bottle filling stations, since bottled water seems impossible to find.

Governments at all levels have set up environmental protection departments with cross-ministry mandates to seek out and implement climate actions within their constitutional boundaries.

SUMMARY

In just twelve years, Medicine Hat has embraced the future. Businesses thrive, based on the growing fields of renewable energy and value-added agriculture. People feel prosperous, with the money they previously spent on natural gas being spent on home improvements instead. Young adults recognize the positive and lively atmosphere, and are moving here to be part of it.

The changes to our society that are suggested above are additive. Progress in one area will stimulate and support improvements in other areas. The impact of less visible changes can be strengthened by finding ways to highlight them, such as lawn signs or bus placards.

Although each action makes sense by itself, the hard realities of starting a business mean that it will prove difficult to make a profit, at least at the start. Having a committed audience to support new ventures will be critical. This could involve neighbourhood associations, environmental clubs, community garden associations, or similar groups negotiating discounts for their members at local shops to create a loyal customer base. As mentioned earlier, forming groups of people committed to creating a more sustainable community will be key to making significant progress.

Together, residents of south-east Alberta have achieved a sustainable lifestyle in just a few years!

THE NEXT STEP

Is this Vision a positive view of the future? Will it motivate ranchers, small town residents and city dwellers to collectively rejuvenate the human, economic and natural ecology of our prairie region?

We hope that you will find at least a portion of this Future that resonates with you, and that you will be inspired to work toward achieving it. Please support others who are building similar, or compatible, parts of this vision.

Above all, remember that every step of this journey will be fun, and bring us all a more lively and enjoyable life!



If you have comments, or would like to add a component to Transition Town Medicine Hat that I have not mentioned, please send me an e-mail at: info@transitionmedicinehat.ca